

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-8, and add new claims 9-28, as follows:

Claims 1-8 (Cancelled).

Claim 9 (New) A thermoplastic resin composition comprising:

30-98 wt. % of a thermoplastic resin (1); and

2-70 wt. % of a higher  $\alpha$ -olefin polymer (3) comprising  $\geq 50$  mol % of an  $\alpha$ -olefin having 10 or more carbon atoms,

wherein the higher  $\alpha$ -olefin polymer (3) has a stereoregularity index M2 of  $\geq 50$  mol % and a single melting point ( $T_m$ ) of  $0^\circ\text{C}$  to  $100^\circ\text{C}$ .

Claim 10 (New) The thermoplastic resin composition according to claim 9, wherein the thermoplastic resin composition comprises:

50-95 wt. % of the thermoplastic resin (1); and

5-50 wt. % of the higher  $\alpha$ -olefin polymer (3).

Claim 11 (New) The thermoplastic resin composition according to claim 9, wherein the thermoplastic resin composition comprises:

70-90 wt. % of the thermoplastic resin (1); and

10-30 wt. % of the higher  $\alpha$ -olefin polymer (3).

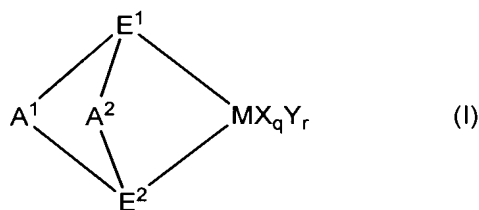
Claim 12 (New) The thermoplastic resin composition according to claim 9, wherein the higher  $\alpha$ -olefin polymer (3) has an isotactic structure.

Claim 13 (New) The thermoplastic resin composition according to claim 9, wherein the higher  $\alpha$ -olefin polymer (3) comprises 80-100 mol % of the  $\alpha$ -olefin having 10-40 carbon atoms, wherein the higher  $\alpha$ -olefin polymer (3) has a stereoregularity index M2 of 55-85 mol % and a single melting point ( $T_m$ ) of 20-80°C.

Claim 14 (New) The thermoplastic resin composition according to claim 9, wherein the higher  $\alpha$ -olefin polymer (3) comprises 90-100 mol % of the  $\alpha$ -olefin having 10-26 carbon atoms, wherein the higher  $\alpha$ -olefin polymer (3) has a stereoregularity index M2 of 55-75 mol % and a single melting point ( $T_m$ ) of 25-55°C.

Claim 15 (New) The thermoplastic resin composition according to claim 9, wherein the higher  $\alpha$ -olefin polymer (3) has a weight average molecular weight ( $M_w$ ) of 1,000-10,000,000 and a GPC molecular weight distribution ( $M_w/M_n$ ) of  $\leq 4.0$ .

Claim 16 (New) The thermoplastic resin composition according to claim 9, wherein the higher  $\alpha$ -olefin polymer (3) is produced by a process comprising polymerizing the  $\alpha$ -olefin having 10 or more carbon atoms in the presence of a polymerization catalyst comprising a transition metal compound (A) represented by the following general formula (I) and at least one component (B) selected from the group consisting of a compound (B-1) capable of reacting with the transition metal compound (A) or a derivative thereof to form an ionic complex, and an aluminoxane compound (B-2):



wherein

M is a metal atom selected from Groups 3-10 and the lanthanum series of the Periodic Table;

$E^1$  and  $E^2$  are identical or different ligands each independently selected from the group consisting of a substituted cyclopentadienyl group, an indenyl group, a substituted indenyl group, a heterocyclopentadienyl group, a substituted heterocyclopentadienyl group, an amide group, a phosphide group, a hydrocarbon group, and a silicon-containing group, wherein  $E^1$  and  $E^2$  form a structure cross-linked through  $A^1$  and  $A^2$ ;

X is one or more  $\sigma$ -bonding ligands which may be identical or different, and may be cross-linked with another X,  $E^1$ ,  $E^2$  or Y;

Y is one or more Lewis bases, which may be identical or different, and may be cross-linked with another Y,  $E^1$ ,  $E^2$  or X;

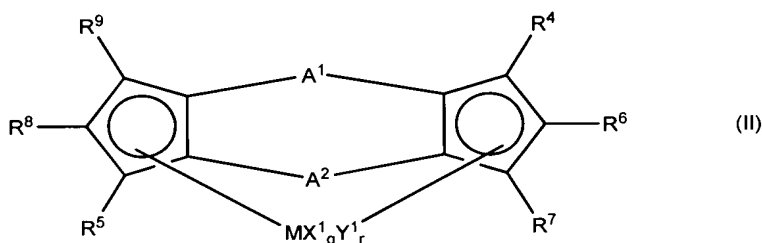
$A^1$  and  $A^2$  are identical or different divalent cross-linking groups for linking the  $E^1$  and  $E^2$  ligands, and are each independently selected from the group consisting of a hydrocarbon group having 1 to 20 carbon atoms, a hydrocarbon group comprising a halogen and having 1 to 20 carbon atoms, a group comprising silicon, a group comprising germanium, a group comprising tin, -O-, -CO-, -S-, -SO<sub>2</sub>-, -Se-, -NR<sup>1</sup>-, -PR<sup>1</sup>-, -P(O)R<sup>1</sup>-, -BR<sup>1</sup>-, and -AlR<sup>1</sup>-, wherein R<sup>1</sup> represents a hydrogen atom, a halogen atom, a hydrocarbon group having 1 to 20 carbon atoms, and a hydrocarbon group comprising a halogen atom and having 1 to 20 carbon atoms;

q is an integer of 1-5 of [(valence of M)-2]; and

r is an integer of 0 to 3.

Claim 17 (New) The thermoplastic resin composition according to claim 9, wherein the higher  $\alpha$ -olefin polymer (3) is produced by a process comprising polymerizing the  $\alpha$ -olefin having 10 or more carbon atoms in the presence of a polymerization catalyst comprising a transition metal compound (A) represented by the following general formula (II) and at least one component (B)

selected from the group consisting of a compound (B-1) capable of reacting with the transition metal compound (A) or a derivative thereof to form an ionic complex, and an aluminoxane compound (B-2):



wherein

M is a metal atom selected from Groups 3-10 and the lanthanum series of the Periodic Table;

X¹ is one or more  $\sigma$ -bonding ligands which may be identical or different, and may be cross-linked with another X¹, Y¹ or a cyclopentadienyl ligand;

Y¹ is one or more Lewis bases, which may be identical or different, and may be cross-linked with another Y¹, X¹ or a cyclopentadienyl ligand;

A¹ and A² are identical or different divalent cross-linking groups for linking a cyclopentadienyl ligand, and are each independently selected from the group consisting of a hydrocarbon group having 1 to 20 carbon atoms, a hydrocarbon group comprising a halogen and having 1 to 20 carbon atoms, a group comprising silicon, a group comprising germanium, a group comprising tin, -O-, -CO-, -S-, -SO₂-, -Se-, -NR¹-, -PR¹-, -P(O)R¹-, -BR¹-, and -AlR¹-, wherein R¹ represents a hydrogen atom, a halogen atom, a hydrocarbon group having 1 to 20 carbon atoms, and a hydrocarbon group comprising a halogen atom and having 1 to 20 carbon atoms;

R⁴ to R⁹ are identical or different and are each independently selected from the group consisting of a hydrogen atom, a halogen atom, a hydrocarbon group having 1 to 20 carbon atoms, a hydrocarbon group comprising a halogen atom and having 1 to 2 carbon atoms, a group

comprising silicon, and a group comprising a heteroatom, with the proviso that at least one of R<sup>4</sup> to R<sup>9</sup> is not a hydrogen atom;

q is an integer of 1-5 of [(valence of M)-2]; and

r is an integer of 0 to 3.

Claim 18 (New) A molded article, sheet or film comprising the thermoplastic resin composition according to claim 9.

Claim 19 (New) A thermoplastic resin composition comprising:

10-94 wt. % of a thermoplastic resin (1);

5-70 wt. % of an elastomer (2); and

1-30 wt. % of a higher  $\alpha$ -olefin polymer (3) comprising  $\geq 50$  mol % of an  $\alpha$ -olefin having 10 or more carbon atoms,

wherein the higher  $\alpha$ -olefin polymer (3) has a stereoregularity index M2 of  $\geq 50$  mol % and a single melting point (T<sub>m</sub>) of 0°C to 100°C.

Claim 20 (New) The thermoplastic resin composition according to claim 19, wherein the thermoplastic resin composition comprises:

35-88.5 wt. % of the thermoplastic resin (1);

10-50 wt. % of the elastomer (2); and

1.5-15 wt. % of the higher  $\alpha$ -olefin polymer (3).

Claim 21 (New) The thermoplastic resin composition according to claim 19, wherein the thermoplastic resin composition comprises:

52-83 wt. % of the thermoplastic resin (1);

15-40 wt. % of the elastomer (2); and  
2-8 wt. % of the higher  $\alpha$ -olefin polymer (3).

Claim 22 (New) The thermoplastic resin composition according to claim 19, wherein the higher  $\alpha$ -olefin polymer (3) has an isotactic structure.

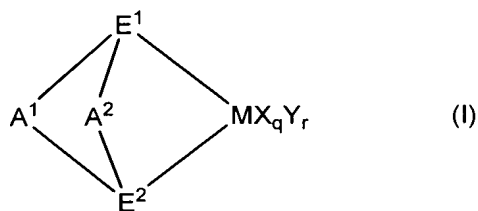
Claim 23 (New) The thermoplastic resin composition according to claim 19, wherein the higher  $\alpha$ -olefin polymer (3) comprises 80-100 mol % of the  $\alpha$ -olefin having 10-40 carbon atoms, wherein the higher  $\alpha$ -olefin polymer (3) has a stereoregularity index M2 of 55-85 mol % and a single melting point ( $T_m$ ) of 20-80°C.

Claim 24 (New) The thermoplastic resin composition according to claim 19, wherein the higher  $\alpha$ -olefin polymer (3) comprises 90-100 mol % of the  $\alpha$ -olefin having 10-26 carbon atoms, wherein the higher  $\alpha$ -olefin polymer (3) has a stereoregularity index M2 of 55-75 mol % and a single melting point ( $T_m$ ) of 25-55°C.

Claim 25 (New) The thermoplastic resin composition according to claim 19, wherein the higher  $\alpha$ -olefin polymer (3) has a weight average molecular weight ( $M_w$ ) of 1,000-10,000,000 and a GPC molecular weight distribution ( $M_w/M_n$ ) of  $\leq 4.0$ .

Claim 26 (New) The thermoplastic resin composition according to claim 19, wherein the higher  $\alpha$ -olefin polymer (3) is produced by a process comprising polymerizing the  $\alpha$ -olefin having 10 or more carbon atoms in the presence of a polymerization catalyst comprising a transition metal compound (A) represented by the following general formula (I) and at least one component (B) selected from the group consisting of a compound (B-1) capable of reacting with the transition

metal compound (A) or a derivative thereof to form an ionic complex, and an aluminoxane compound (B-2):



wherein

M is a metal atom selected from Groups 3-10 and the lanthanum series of the Periodic Table;

$E^1$  and  $E^2$  are identical or different ligands each independently selected from the group consisting of a substituted cyclopentadienyl group, an indenyl group, a substituted indenyl group, a heterocyclopentadienyl group, a substituted heterocyclopentadienyl group, an amide group, a phosphide group, a hydrocarbon group, and a silicon-containing group, wherein  $E^1$  and  $E^2$  form a structure cross-linked through  $A^1$  and  $A^2$ ;

X is one or more  $\sigma$ -bonding ligands which may be identical or different, and may be cross-linked with another X,  $E^1$ ,  $E^2$  or Y;

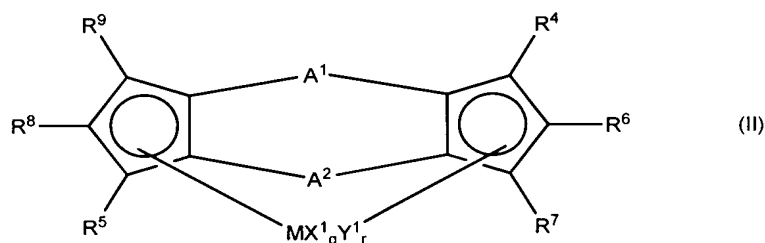
Y is one or more Lewis bases, which may be identical or different, and may be cross-linked with another Y,  $E^1$ ,  $E^2$  or X;

$A^1$  and  $A^2$  are identical or different divalent cross-linking groups for linking the  $E^1$  and  $E^2$  ligands, and are each independently selected from the group consisting of a hydrocarbon group having 1 to 20 carbon atoms, a hydrocarbon group comprising a halogen and having 1 to 20 carbon atoms, a group comprising silicon, a group comprising germanium, a group comprising tin, -O-, -CO-, -S-, -SO<sub>2</sub>-, -Se-, -NR<sup>1</sup>-, -PR<sup>1</sup>-, -P(O)R<sup>1</sup>-, -BR<sup>1</sup>-, and -AlR<sup>1</sup>-, wherein R<sup>1</sup> represents a hydrogen atom, a halogen atom, a hydrocarbon group having 1 to 20 carbon atoms, and a hydrocarbon group comprising a halogen atom and having 1 to 20 carbon atoms;

q is an integer of 1-5 of [(valence of M)-2]; and

r is an integer of 0 to 3.

Claim 27 (New) The thermoplastic resin composition according to claim 19, wherein the higher  $\alpha$ -olefin polymer (3) is produced by a process comprising polymerizing the  $\alpha$ -olefin having 10 or more carbon atoms in the presence of a polymerization catalyst comprising a transition metal compound (A) represented by the following general formula (II) and at least one component (B) selected from the group consisting of a compound (B-1) capable of reacting with the transition metal compound (A) or a derivative thereof to form an ionic complex, and an aluminoxane compound (B-2):



wherein

M is a metal atom selected from Groups 3-10 and the lanthanum series of the Periodic Table;

$X^1$  is one or more  $\sigma$ -bonding ligands which may be identical or different, and may be cross-linked with another  $X^1$ ,  $Y^1$  or a cyclopentadienyl ligand;

$Y^1$  is one or more Lewis bases, which may be identical or different, and may be cross-linked with another  $Y^1$ ,  $X^1$  or a cyclopentadienyl ligand;

$A^1$  and  $A^2$  are identical or different divalent cross-linking groups for linking a cyclopentadienyl ligand, and are each independently selected from the group consisting of a hydrocarbon group having 1 to 20 carbon atoms, a hydrocarbon group comprising a halogen and having 1 to 20 carbon atoms, a group comprising silicon, a group comprising germanium, a group



comprising tin, -O-, -CO-, -S-, -SO<sub>2</sub>-, -Se-, -NR<sup>1</sup>-, -PR<sup>1</sup>-, -P(O)R<sup>1</sup>-, -BR<sup>1</sup>-, and -AlR<sup>1</sup>-, wherein R<sup>1</sup> represents a hydrogen atom, a halogen atom, a hydrocarbon group having 1 to 20 carbon atoms, and a hydrocarbon group comprising a halogen atom and having 1 to 20 carbon atoms;

R<sup>4</sup> to R<sup>9</sup> are identical or different and are each independently selected from the group consisting of a hydrogen atom, a halogen atom, a hydrocarbon group having 1 to 20 carbon atoms, a hydrocarbon group comprising a halogen atom and having 1 to 2 carbon atoms, a group comprising silicon, and a group comprising a heteroatom, with the proviso that at least one of R<sup>4</sup> to R<sup>9</sup> is not a hydrogen atom;

q is an integer of 1-5 of [(valence of M)-2]; and

r is an integer of 0 to 3.

Claim 28 (New) A molded article, sheet or film comprising the thermoplastic resin composition according to claim 19.